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Foreign National Cyber Access Risk Assessment Version 2.1 November 2, 2011

Division: PSC Number: FNCA-APS6
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Service/Computer/Cluster: Argonne Employees With System

Administrator Privileges

Instructions:

- 1. Use the form below to assess the vulnerabilities of your environment. Please extend the form if your environment has features not discussed below.
- 2. Identify the access controls you have in place to manage the user's environment. In addition to the standard login authentication processes, consider default file permissions, WWW content access, ftp server access, file sharing, etc. Provide enough detail to explain your answer.
- 3. Answering Yes or No to a question does not disqualify a legitimate user from accessing a computer system. Rather these questions are designed to help you assess the risks involved in granting any user access to a computer system by highlighting potential concerns.
- 4. You should only need one of these vulnerability assessments for each computing environment. Please update this form if your environment changes significantly.
- 5. Keep this on file in your division.

If this user will be provided a computer:

	Vulnerabilities	Response/Access Controls
1.	Are there data or applications on the computer that this user will be using that are on the ANL Sensitive Technologies List or otherwise sensitive (privacy act, proprietary, OUO, etc.)?	No.
2	Describe the mechanisms that will prevent this user from examining, altering, or using inappropriate applications or data on his computer? For example	User has administrator privileges and must follow all Lab policies.
2.1	Have you removed the inappropriate data or applications?	Only required applications and data are available.
2.2	Are all users instructed in the secure management of data and applications?	Yes. All users take the ESH 223 computer protection training.
2.3	Does the computer system require authenticated access?	Yes.
2.4	Can you uniquely identify users?	Yes.
2.5	Do you establish minimal default file permissions for all accounts?	Yes.
2.6	How do you verify file permissions are correctly set for data and applications?	Scans and Audits.

If this user will be provided network access to computer services (mail, ftp, etc.):

	Vulnerabilities	Response/Access Controls
3.	Are there data or applications on the servers that this user will access that are on the ANL Sensitive Technologies List or otherwise sensitive (privacy act, proprietary, OUO, etc.)?	No.
4.	Describe the mechanisms that will prevent this user from examining, altering, or using inappropriate applications or data stored on computers providing these services? For example:	.User only has administrator privileges on specific systems required for their job.
4.1	Does having access to this server enable unauthenticated access to a local intranet (by	No. These servers do not permit subsequent connection to other services.

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	virtue of having an division.anl.gov address)?	
4.2	Does having an account on this server enable authenticated access to other computers?	No
4.3	Are other computers sharing file systems that may be accessible from this server (e.g. NFS, Windows file shares)?	Yes but authenticated access is required and shares are protected via ACL's and file permissions.
4.3.1	If yes, how do you control network file access?	ACL's and share permissions.
4.3.2	How do you verify network file permissions are correct?	Scans and audits.

If this user's network connection provides intimate¹ access to a computing environment:

	Vulnerabilities	Response/Access Controls
5.	Are there data or applications in the network vicinity of this user's computer that are on the ANL Sensitive Technologies List or otherwise sensitive (privacy act, proprietary, OUO, etc.)?	Possibly. This network does permit hosts on this network to electronically reach other ANL hosts which may have sensitive data.
6.	Describe the mechanisms that will prevent this user from examining, altering, or using inappropriate applications or data stored on computers in the vicinity? For example (consider using nmap on the subnet to identify open services):	The APS servers require authenticated access. The division subnet is a switched network and all system logs are monitored.
6.1	Does having access to this computer enable unauthenticated access to a local intranet (by virtue of having an <i>division.anl.gov</i> address)?	Yes. Access to web servers for APS information and procedures and to ANL web.
6.2	Does having an account on this computer enable authenticated access to other computers?	No.
6.3	Are other computers sharing file systems that may be accessible to this computer (e.g. NFS, Windows file shares)?	Yes but authenticated access is required and shares are protected via ACL's and file permissions.
6.3.1	If yes, how do you control network file access?	Login authentication.
6.3.2	How do you verify network file permissions are correct?	Periodic scans and internal audits.

If this user has administrative privileges:

that the divisi Admi	at is the scope of the administration privileges	
Admi	this user has over the computer systems in your	If approved by supervisor only has admin
0 4 .1	sion? Example: Domain Administrator, E-Mail ninistrator, Unix NIS, Desktop Administrator, etc	access on computers required for their job.
this u Sensi	there data or applications on the computer(s) that user will be managing that are on the ANL sitive Technologies List or otherwise sensitive vacy act, proprietary, OUO, etc.)?	No.

¹ For example: What is visible in the Network Neighborhood? Are there unrestricted NFS exports on the local network? If a user runs topdump or places an ethernet interface in promiscuous mode, what will they see?

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8.1	Do the data owners understand the confidentiality, integrity, and availability implications of this user's administrative privileges?	Yes.
8.2	Have the data owners approved this user's access to administrative privileges?	Access must be approved by supervisor.
10.	Does the user have remote access to the ANL network?	Yes.
10.1	Would remote access enable this user or an offsite accomplice to access sensitive data?	No.
10.1.1	Have the data owners approved this user's remote access capabilities?	No.
11.	Do you have a process in place to minimize the permissions that this System Administrator must have to perform his/her work function?	Yes. User only has access privileged access to systems required for their job.

Management approval:

12.	Has your division director accepted this risk	Vas
	assessment?	168.